

December 2006

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Marijn Janssen
Delft University of Technology

Anton Joha
Morgan Chambers

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Governance of Shared Services in Public Administration

Marijn Janssen

Faculty of Technology, Policy and Management,
Delft University of Technology,
Jaffalaan 5, NL-2628 BX, Delft,
The Netherlands,
Tel. +31 (15) 278 1140,
MarijnJ@tbm.tudelft.nl

Anton Joha

Morgan Chambers,
Joop Geesinkweg 901-999,
NL-1096 AZ, Amsterdam,
The Netherlands,
Tel. +31 (06) 29438333
anton.joha@morganchambers.com

ABSTRACT

Services are more and more shared among public agencies to gain efficiency benefits. The governance of shared services is a complicated endeavor as it often involves multiple agencies having different objectives and resources, the number of shared services used varies among agencies, technology sophistication differs and non-shared resources of public agencies are interwoven with shared services. The research presented in this paper is aimed at developing a better understanding of the IT governance necessary to share services in public administration. Two case studies are presented and analyzed from a resource-based and dynamic capability view. We found that the ability to share services and the accomplishment of agencies objectives is largely determined by the governance mechanisms. Governance mechanisms need to deal with the different characteristics of agencies and balance customization and commoditization of services to ensure citizen- and business-orientation and at the same time accomplish efficiency.

Keywords (Required)

E-government, shared services, IT governance, case study, resource-based view, dynamic capabilities theory

INTRODUCTION

Within governmental bodies there is a considerable debate about how to best proceed with the development of the new infrastructure required for on-line government (Allen, Juillet, Paquet and Roy, 2001). At the heart of this matter is a dispute about implicit questions of sourcing. One new promising form to gain efficiency is by sharing services (e.g. Bergeron, 2003; Ulbrich, 2003; Janssen and Wagenaar, 2004). By unbundling and concentrating services in a Shared Service Center (SSC), the basic premise is that services can be provided to many users with relatively few efforts, as schematically shown in figure 1. Such centers try to combine the advantages of completely centralized arrangements, e.g. standardization and economies of scale, with the advantages of decentralized arrangements, including flexibility, differentiation, the availability of knowledge and resources on local level (Janssen and Joha, 2006).

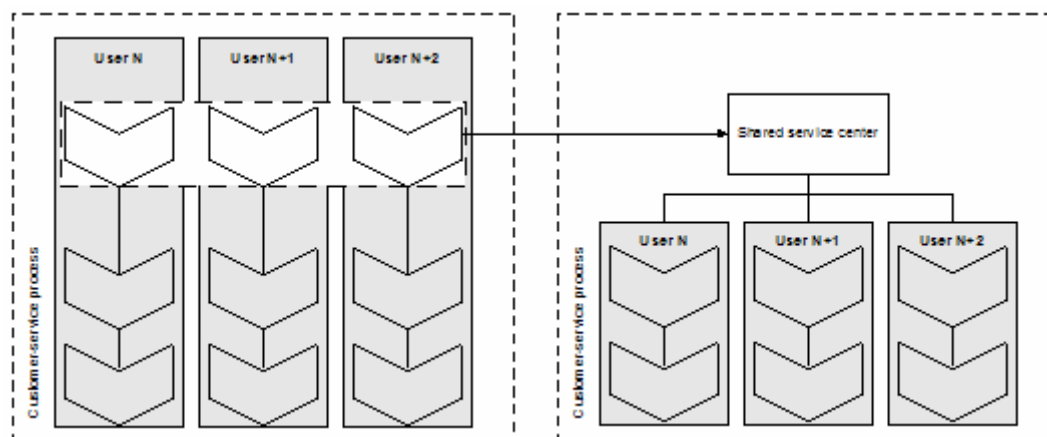


Figure 1: Process of unbundling and concentrating services

The governance of shared services is a complicated endeavor as it involves multiple agencies often having different strategic objectives and resources available. This can result in a different number of shared services used by agencies and in the service provisioning process non-shared services of single public agencies are interwoven with shared services. Moreover, potential partners may have different levels of IT-sophistication that needs to be synchronized before services can be shared.

A large number of organizations and stakeholders are often engaged in governing shared services. Governance mechanisms determine how communication, responsibilities and decision-making structures are formalized (Weill and Ross, 2005). The need for and type of governance mechanisms for shared services is complex and an unexplored domain. The research presented in this paper is therefore aimed at developing a better understanding of the governance mechanisms necessary to deploy shared services in public administration.

ANALYTICAL FRAMEWORK

We take a resource-based and dynamic capabilities view on the governance of shared services. Historically, the Resource Based View (RBV) describes how organizations can gain competitive advantage by differentiating themselves in their collection of resources and inability of other firms to obtain comparable resources (Barney, 1991). More recently RBV is also used to understand why performance of processes within an organization may vary (e.g. Ray et al., 2005). This perspective can be applied to public administration, as it draws the attention to managing the public administration's resources efficiently and at the same time achieve high-levels of service. Resources have become scarce and consequently agencies start to look for ways to better utilize their resources, for example by sharing services.

The *dynamic capability view* describes the organization's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments (Teece et al., 1997). The implementation of shared services requires a governance structure that is able to adequately cope with the various and changing needs and requirements of the multiple stakeholders. The dynamic capability view takes such a dynamic environment into account and emphasizes the concept of 'resource renewal' where existing resources are reconfigured into new functional competencies.

Governance represents the framework for decision rights and accountabilities to encourage desirable behavior in the use of resources (Weill, 2004). Governance is necessary for creating, assembling and exploiting shared services in a network of public agencies, all having various resources and capabilities.

We view governance mechanisms as dependent on the specific organizational resources and capabilities. By combining the RBV and the dynamic capability views we want to improve our understanding of governance structure for shared services. Figure 2 shows the research model for governance of shared services by combining the two theories. Each organization is a collection of unique resources and capabilities. Thus, our framework views differences in governance structures as driven by the unique resources and capabilities of stakeholders. It highlights the need for a fit between the context in which the public agencies operates and its internal resources and capabilities. Hereafter, we discuss the theories in more detail.

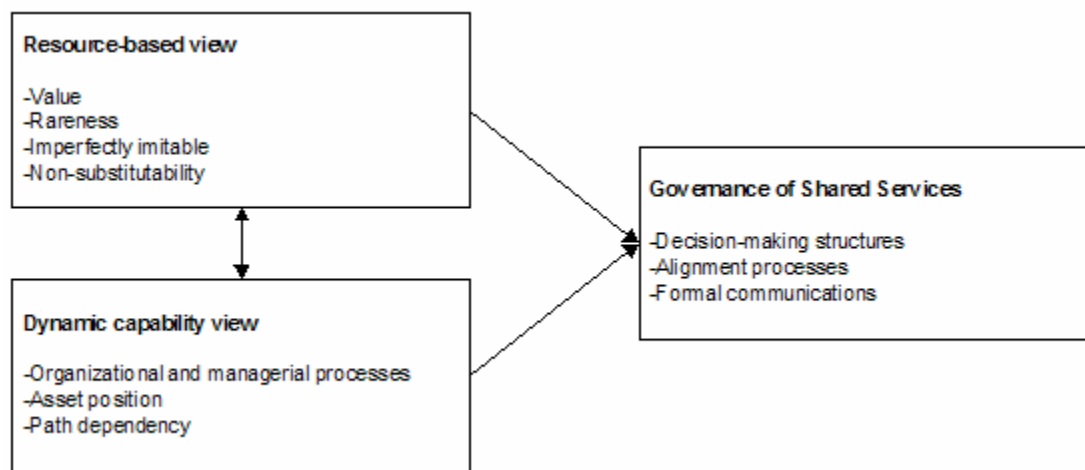


Figure 2: Analytical framework

Resource-based view

Resources can have a tangible or intangible nature and are needed for service provisioning; examples of resources are budget, equipment, proprietary technology, skills and expertise of technology experts and managers. Organization's internal structure and resources are important as the basis for efficient operation and service provisioning. RBV argues that resources are heterogeneously distributed across organizations and are imperfectly transferred between organizations (Barney, 1991; Grant, 1991). This is also implying that resources can and need to be logically structured and governed in order to be operated efficiently, e.g. by means of SSCs. More recently, RBV is used to understand why performance of processes within an organization may vary (Ray et al., 2005). This perspective can be applied to public administration, as it draws the attention to managing the public agencies resources as the basis for efficient operation and service provisioning. RBV states that a resource must be valuable, rare, inimitable and non-substitutable (i.e. VRIN attributes) to confer an advantage in the first place (Barney, 1991) and predicts that valuable, rare and costly to imitate resources affects performance (Ray et al., 2005).

In current environment, public organizations have limited budget and resources, and at the same time are urged to improve their customer-orientation. In public administration, agencies can cooperate and share services in order to gain access to resources that are valuable, rare or hard to create. Thus a shared services strategy enables public organizations to implement their strategies through sharing necessary resources. In this respect RBV explores shared services as a strategic decision often having a long-term impact. The resource-based view attracts the attention to achieving efficiency and customer-orientation objectives through managing an organization's internal resources.

Dynamic capability view

The concept of dynamic capabilities arose from a key shortcoming of the RBV of the firm. The RBV has been criticized for ignoring factors surrounding resources, instead assuming that they simply 'exist'. Dynamic capabilities attempt to bridge this gap by acting as a buffer between firm resources and the changing business environment. Dynamic capabilities help a firm adjust its resource mix and thereby maintain the sustainability of the organization. Teece, Pisano and Shuen (1997) have suggested a view of advantage based on 'dynamic capabilities', also called dynamic resources, which are the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. They argue that sustainability lies with a firm's *managerial and organizational processes*, which are shaped by the firm's *asset position* (resources) and the *paths* available to it. Managerial and organizational processes are referred to be an organization's routines, or patterns of current practice and learning. These processes have three roles:

- *Coordination and integration*: Interdepartmental coordination and resource sharing is necessary to reach the organizational objectives and to create an organization that functions in an efficient and effective way. Those firms that are able to integrate resources see synergetic effects of resources coming together.
- *Learning*: Organizational learning determines how a firm collects, distributes, interprets and responds to changes in the environment.
- *Reconfiguring and transformation*: The environment for firms is constantly changing. Constant reconfiguring and transformation is an extremely important element in addressing the changing requirements and demands from the internal as well as the external environment.
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Specific assets can be an organization's difficult-to-trade knowledge assets and assets complementary to them, as well as its reputational and relational assets. Dynamic capabilities are often characterized as unique and idiosyncratic processes that emerge from path-dependent histories of individual firms (Teece et al., 1997). Eisenhardt and Martin (2000) argue that dynamic capabilities are a set of specific and identifiable processes. SSCs completely depend on organization internal assets and capabilities. Path-dependent histories are related to strategic alternatives available to the firm, and the presence or absence of increasing returns and attendant path dependencies. It takes into account past investments and its repertoire of routines constraining its future behavior, which is frequently a constraining factor when implementing a SSC.

Establishing SSCs can be a reaction to the changing environment and often there is a need to adapt quickly to new legislation or to adopt new technology. Dynamic capabilities are particularly important in settings, which feature technological change (Jarvenpaa and Leidner, 1998). Instead of just matching current resources to opportunities in the market place, a SSC needs to develop the ability to identify new opportunities and respond to them. The deployment of SSCs can be viewed as a way to reconfigure the internal competencies of public agencies to address rapidly changing environments.

IT Governance

The sharing of resources results in new problems about the way the dependencies among public agencies and shared service center can be coordinated. This is the domain of IT governance, which represents the framework for decision rights and

accountabilities to encourage desirable behavior in the use of IT resources (Weill, 2004). Once the decision to implement a SSC is made and the archetypes for making those decisions are mapped out, public agencies must design and implement a coordinated set of governance mechanisms that managers will work with on a daily basis. IT governance goes beyond the debate of centralization/decentralization decision-making, however, the locus of decision-making is an important component (Peterson, 2004).

Enterprises generally design three kinds of governance mechanisms: decision-making structures, alignment processes and formal communications (Weill and Ross, 2005). The *decision-making structures* involve the organizational committees and roles that locate decision-making responsibilities. *Alignment processes* are management techniques for securing widespread and effective involvement in governance decisions and their implementation. This includes the way the funding model of a SSC is organized. Also service level agreements (SLAs) and charge backs are included, which helps the SSC to clarify the costs for IT services. *Formal communications* is about reaching effective IT governance, by two-way communication and a good participation/collaboration relationship between business and IT people (Reich and Benbasat, 2000). A huge barrier to effective IT governance is lack of understanding about how decisions are made, what processes are being implemented and what the desired outcomes are. Relational mechanisms are very important and can be communicated in a variety of ways: general announcements, the institution of formal committees, regular communication from central level, one-on-one sessions, intranets and so on. More communication generally means more effective governance (Weill and Ross, 2005).

CASE STUDIES

We investigated two different case studies, one initiated at the central and the other one initiated at the decentral level. The case studies were selected to represent a mix of centralized and decentralized governance, as these are often viewed as an important variable (e.g. Peterson, 2004; Weill and Ross, 2005). We interviewed in total 14 persons during the period of September 2005 till February 2006. We interviewed managers of the SSCs, IT staff, account managers and users involved in the customer board and not involved in the customer board.

ICTU – Centralized service

ICTU (www.ictu.nl) is a central knowledge sharing and IT-development foundation aimed at supporting local organizations to adopt information technology. The Ministry of Interior and the Dutch Municipality association founded the ICTU in 2001. The board is made up of representatives of all layers of government, including ministries, provinces, water boards and municipalities. ICTU has a large number of knowledge and development programs and a control and maintenance organization. Each project should contribute to the solving of a problem of multiple public agencies. As such local agencies are the problem owners, but the problem is solved at the central level. Most of the ICTU programs are partly funded by local governmental agencies and partly funded by the Ministry of Interior.

A number of projects are aimed at developing services that can be shared by public agencies. The shared services are aimed at helping governmental agencies to adopt new information technology. The shared services are never developed from scratch, instead they are derived from best practices in other countries or from successful local initiatives. As such the innovativeness and risk of developing services is kept limited and the main benefits arise from the economies of scale. The potential users of the shared services are *all* public agencies in the Netherlands. Some of the shared services are provided without any fee to the agencies, as they are funded centrally, for others a fee has to be paid.

The main advantages of the shared services for public agencies come from the avoidance of the burden to develop and maintain services themselves and to have in-house expertise in that area. Although it saves these resources, it consumes governance resources. As the services are provided to many agencies, the ICTU adopted a 'take or leave it' approach. No customized services are offered.

Federated municipalities

Six small- and medium-sized municipalities recognized the need for sharing services and started collaborating, as their own capacity and resources are limited. In the past, all the municipalities had their own information development, control and maintenance departments. Expertise was scattered around the organizations and the departments were often not able to gain access to the expertise needed and to consolidate experiences. Each municipality had between 2 and 5 FTE in their IT departments. A consultancy organization was asked to make the business case, and the economic rational for shared services was outlined. The municipalities decided to concentrate their ICT departments within one SSC, as they had similar objectives and ambitions.

All IT activities were concentrated at one physical located in the largest municipality. The SSC employees also spend time at the other municipalities to ensure the ability to quickly react to local needs. The SSC was founded as a legal entity having its own responsibilities and being accountable to the board of directors. The board members are representatives from the six municipalities. Policy makers at the municipalities make proposals for the strategic directions and decisions that need to be taken in cooperation with the SSC. A helpdesk function was created functioning as a one-stop shop for all users. The helpdesk prioritizes requests and forwards the user requests to the right person.

	Case 1: ICTU (centralized)	Case 2: Federated municipalities (decentralized)
Drivers and goals	Avoid duplication of efforts and give guidance to fragmented developments by standardization. Create generic facilities for all public agencies to facilitate the reduction of costs of citizens and public agencies.	Gain access to expertise and skills out-of-reach for a single agency. New services and higher service levels. Focus on their core business, easier control of IT resources.
Initiated/ funded by	Ministry of Interior and municipality association (central).	Six municipalities (decentralized).
Users	All public agencies in the Netherlands. Current users are municipalities, ministries, and water boards.	The initiators are the users: 6 municipalities.
Types of shared services	Offering of well-standardized services, including authorization, e-form generation, digital safe, citizens' registry.	All kinds of homogenous and heterogeneous IT services, including helpdesk, application development, control and maintenance, hardware and software procurement.
Essential capabilities	<ul style="list-style-type: none"> • Coordination and integration to improve efficiency. 	<ul style="list-style-type: none"> • Coordination and integration to gain access to new expertise and services. • Learning to react to changing circumstances and enable innovation. • Enabling and facilitating reconfiguration and transformation.
Key IT governance mechanisms	<ul style="list-style-type: none"> • Centralized decision-making. • Commoditized services fitting within governmental architecture. • SLAs, account managers. • Website, regular user meetings, conference participation. 	<ul style="list-style-type: none"> • Consensus-based, cooperative decision-making. • Planning of IT developments and architectures. • User boards determine prioritization of projects and decision-making within projects • User boards with process owners, line managers, administrative workers and SSC (IT) representatives. • Internal municipality letters, email news, face-to-face communication.

Table 1. Overview of case study characteristics

By creating a SSC, the municipalities have access to more skills and expertise and they were able to develop new systems and services, as prior to the introduction of the SSC the maintenance and control efforts consumed almost all resources. The municipalities had a similar size and there was no domination of one municipality over the others. Decision-making is based on consensus and all decisions required relatively long negotiation processes.

Analysis and discussions

Our theoretical framework synthesizes rich traditions from RBV, the dynamic capability view and governance and is aimed at developing a better understanding of the governance mechanisms necessary to deploy shared services in public administration. Table 1 compares the main characteristics of the two case studies.

The *decision-making structures* are schematically depicted in figure 3. The decision-making in the federated case study is based on consensus and the representation and authority is aimed at producing synergies between agencies. The ICTU case study relies on decision-making without direct user representation and decision powers are centralized. There is no user board; the governance board has user representatives, however, it concerns high-ranked officials, which have strategic knowledge, but hardly having any tactical knowledge and having no familiarity with typical user problems. The main concern of the board is to acquire as many users (public agencies) as possible to gain economies of scale. Service scalability and availability are important characteristics that are managed by the board. The account managers try to target as many potential users as possible and convince them to adopt the services, without providing any customization. Changes in services affect almost all users, who are only involved after the decision has been made.

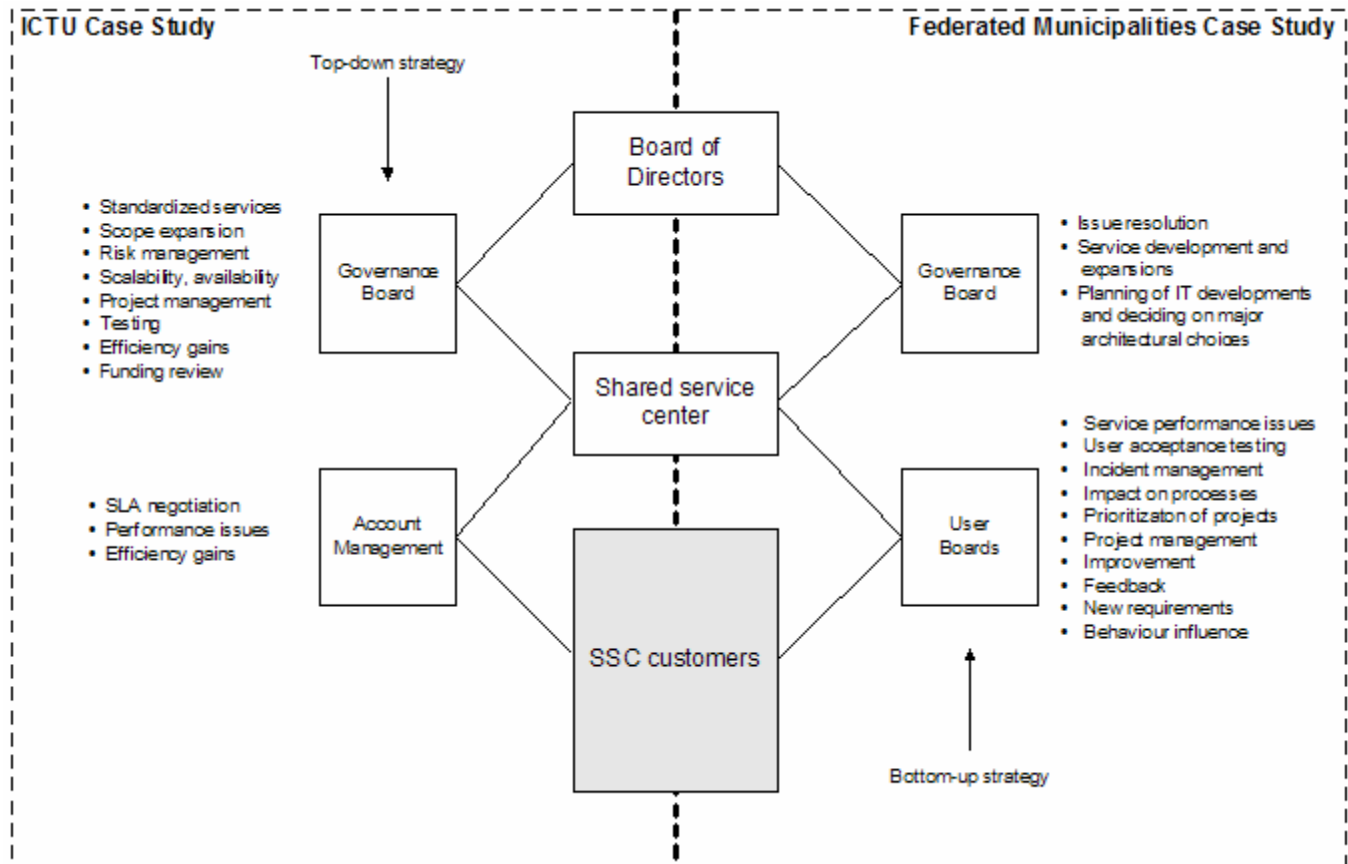


Figure 3. Decision-making structure

The federation has a distributed decision-making power based on equal contributions. The federation has several user boards consisting of representatives of the users, which might be process owners, line managers, and administrative workers. Line managers' influence for large extends the need for IT and services and the SSC develops and operates. The governance board allocates the budget for control, maintenance, and development.

The federated SSC makes use of the generic services provided by ICTU. The federated SSC modifies the ICTU services to customize them to the needs of the local situation. The level of commoditization of shared services determines the efficiency that can be gained, however limits the customization and consumer orientation. By making use of the ICTU services the federated SSC benefits from the economies of scale obtained from using the shared services of the ICTU and customer-orientation by customizing the services.

Alignment processes should bring everybody on board by providing input into governance decisions and formalizing the processes implementing those decisions (Weill and Ross, 2005). In the ICTU case study the participants' involvement and change process is hardly given any attention. Public agencies can either connect to the central facilities or not. Although it saves development and maintenance efforts, the efficiency gains for a single agency are limited. They still need to keep themselves up-to-date of what is happening, need to adapt their processes to changes in the shared service and sometimes have to customize the services. Although the benefits for a single agency might be limited, there are so many agencies using the facilities that this results in large cost-savings for the public administration as a whole. In the federated case study all participants are involved and change processes are carefully management.

Formal communications are intended to spread the word about IT governance decisions and processes throughout the organizations. In the ICTU case study some misunderstandings result from the lack of involvement in the decision-making process. Some users complain that the ICTU seems to be able to change the service-level agreements or even the services without their consent and informing them. The ICTU managers, however, stated that there were clear, formal processes to communicate changes and to get users involved in change processes. The interviewees in the federated case study could not remember any conflict. They attributed this to the need to have clear formal decisions rights before taking strategic decisions.

The RBV draws the attention to managing the public administration's resources as the basis for efficient service provisioning. The federation case shows that shared acquisition of resources and concentrating them can bridge the resource and capability gap. In both cases, it was found that utilizing a shared service strategy involves changing business activities, resources, management models and organizations. It is strikingly that the ICTU does not provide any change support capabilities, as it is their mission to support agencies to adopt technology. Several interviewees indicated that communication between users and SSC is a key capability that affects the shared service process performance, which is consistent with resource-based predictions.

Local municipalities are faced with a reduction of budgets and at the same time pressure to improve their services. The interviewees in the local public agencies stated that their services are often unique and they often need to customize the generic ICTU services in order to meet the conditions of the local environment. Each agency faces other types of problems such as degeneration of the old intercity, corruption, drugs-abuses, parking problems, ability to attract entrepreneurs and so on. As such, by making use of the federated SSCs, the municipalities can maintain their distinctiveness of services and products, customized to meet the conditions of their own geographical region, and gain efficiency benefits and access to expertise through cooperating in the SSC.

The services shared by ICTU do not meet all the *VRIN attributes*. ICTU provides relatively standardized services that can be substituted by services provided other public or private organizations. As the services are often free or available for a small amount, the use of alternative services is not attractive. Consistently with the predictions of the RBV (Barney, 1991), exploiting the ICTU shared services can increase the efficiency compared to what would be the case if these resources would not be exploited. Both SSCs provide resources that are rare and costly to imitate. The resource attributes of shared services can explain the variance in governance processes. The ICTU services are more like commodities and loosely coupled. The governance model seems to emphasis this aspect by creating a large distance with the users, by providing no change support and by having more centralized decision-making structures. On the other hand, the use of the SSC in the federated case study is a strategic decision having large implications and that cannot easy be undone. The SSC and municipalities are interwoven by the services and governance model and the emphasis is on close relationships between users and the SSC and decentralized decision-making. The introduction of the SSC required a transformation of the municipalities.

The *organizational and managerial processes* of the dynamic capability view show the variety in processes. The ICTU processes are primarily aimed at creating coordination and integration capabilities to enable the sharing of services among as many agencies as possible in order to gain economies of scale. In addition, the federated case study also includes the learning capabilities, to adapt to changes, and the reconfiguration and transformation processes in order to improve the operational business processes.

The *asset position* of a public agency seems to results in more or less urgency to use shared services. The lesser resources, the higher the sense-of-urgency and the more agencies were willing to use the shared services. Surprisingly, the less resources are available, the higher the need to influence the design of the governance mechanisms. This might be explained from the higher dependency on the shared services. Agencies with few resources become fully dependent on the shared services, whereas agencies having more resources at their disposal seem to be less dependent. They have the capabilities to switch to alternatives services.

Both case studies show that *path dependency* is an important attribute, as it reflects the historically grown decision rights and routines of organizations. The ICTU shared services are initiated at the central level and a top-down approach is taken. Best

practices are adopted and implemented. The ICTU had no user board guiding daily actions and does not take into account the services already in place. In contrast, the federated SSC had to first standardize resources, synchronize the level of IT sophistication and had to replace some information systems in favor of others. Although in the federated case study the decisions had a long-term impact on the six municipalities, the interviewees indicated that the use of the ICTU shared services caused more resistance than the use of the federated services. This might be because ICTU was initiated from the central level, without user involvement, using a top-down strategy, whereas the federated case was initiated at the local level, using a bottom-up strategy.

CONCLUSION

In this paper we investigated two case studies from a resource-based and dynamic capability view to improve our understanding of the governance mechanisms necessary to deploy shared services in public administration. The case studies show that the SSCs initiated at the central and decentral level result in different IT governance mechanisms. We found that the ability to share services and the accomplishment of objectives is largely determined by the governance structure and mechanisms. Not surprisingly, the study revealed that the governance mechanisms should be aligned with the agencies objectives. The level of commoditization of shared services determines the efficiency that can be gained, however, limits customization. Governance mechanisms need to balance carefully customization and commoditization efforts to ensure consumer orientation and at the same time accomplish efficiency by profiting from economies of scale and scope.

We found that both the resource-based and dynamic capability view contribute to our understanding of the governance of shared services. The resource attributes account for differences in the governance structure, as the ICTU case study provides more commodity services and the governance structure is consequently more focused on dealing with large number of users, gaining efficiency advantages without offering any customization or change management support. The federated case study provides customized services to a limited number of agencies and the governance structure is based on equal decision-rights and is able to deal with the characteristics of the local situation of each agency. The dynamic capability view draws the attention to the need for users to have capabilities to integrate shared services in their processes. The asset position of public agencies results in more or less urgency to adopt shared services and the need to have more or less influence on the way shared services are governed. Moreover, our case studies show that different paths, either a top-down or a bottom-up, result in different governance structures.

A limitation of our research is that we only conducted two case studies and use two theories. Currently we are in the process of conducting more case studies to generalize our findings and we also are investigating the advantages of the inclusions of other theories.

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